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1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/375,333B

DATE: 11/12/2003

TIME: 09:15:25

Input Set : A:\stk-075.ST25.txt

Output Set: N:\CRF4\11122003\I375333B.raw

3 <110> APPLICANT: Oppermann, Hermann
 4 Tai, Mei-Sheng
 5 McCartney, John
 7 <120> TITLE OF INVENTION: Modified TGF-beta Superfamily Proteins
 9 <130> FILE REFERENCE: STK-075
 11 <140> CURRENT APPLICATION NUMBER: US 09/375,333B
 12 <141> CURRENT FILING DATE: 1999-08-16
 14 <160> NUMBER OF SEQ ID NOS: 124
 16 <170> SOFTWARE: PatentIn version 2.0
 18 <210> SEQ ID NO: 1
 19 <211> LENGTH: 35
 20 <212> TYPE: PRT
 21 <213> ORGANISM: Drosophila melanogaster
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 24 <223> OTHER INFORMATION: 60-A
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 32 Glu Asn Val Asn Leu Lys Lys Tyr Arg Asn Met Ile Val Lys Ser Cys
 33 20 25 30
 36 Gly Cys His
 37 35
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 42 <212> TYPE: PRT
 43 <213> ORGANISM: Homo sapiens
 45 <220> FEATURE:
 46 <223> OTHER INFORMATION: BMP-2
 48 <400> SEQUENCE: 2
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 51 1 5 10 15
 54 Glu Lys Val Val Leu Lys Asn Tyr Gln Asp Met Val Val Glu Gly Cys
 55 20 25 30
 58 Gly Cys Arg
 59 35
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 63 <211> LENGTH: 35
 64 <212> TYPE: PRT
 65 <213> ORGANISM: Homo sapiens
 67 <220> FEATURE:
 68 <223> OTHER INFORMATION: BMP-3
 70 <400> SEQUENCE: 3
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Pb

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Input Set : A:\stk-075.ST25.txt

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76 Lys Asn Val Val Leu Lys Val Tyr Pro Asn Met Thr Val Glu Ser Cys
77 20 25 30
80 Ala Cys Arg
81 35
84 <210> SEQ ID NO: 4
85 <211> LENGTH: 35
86 <212> TYPE: PRT
87 <213> ORGANISM: Homo sapiens
89 <220> FEATURE:
90 <223> OTHER INFORMATION: BMP-4
92 <400> SEQUENCE: 4
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95 1 5 10 15
98 Asp Lys Val Val Leu Lys Asn Tyr Gln Glu Met Val Val Glu Gly Cys
99 20 25 30
102 Gly Cys Arg
103 35
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108 <212> TYPE: PRT
109 <213> ORGANISM: Homo sapiens
111 <220> FEATURE:
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114 <400> SEQUENCE: 5
116 Ala Pro Thr Lys Leu Asn Ala Ile Ser Val Leu Tyr Phe Asp Asp Ser
117 1 5 10 15
120 Ser Asn Val Ile Leu Lys Lys Tyr Arg Asn Met Val Val Arg Ser Cys
121 20 25 30
124 Gly Cys His
125 35
128 <210> SEQ ID NO: 6
129 <211> LENGTH: 35
130 <212> TYPE: PRT
131 <213> ORGANISM: Homo sapiens
133 <220> FEATURE:
134 <223> OTHER INFORMATION: BMP-6
136 <400> SEQUENCE: 6
138 Ala Pro Thr Lys Leu Asn Ala Ile Ser Val Leu Tyr, Phe Asp Asp Asn
139 1 5 10 15
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143 20 25 30
146 Gly Cys His
147 35
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152 <212> TYPE: PRT
153 <213> ORGANISM: Homo sapiens
155 <220> FEATURE:

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Input Set : A:\stk-075.ST25.txt
Output Set: N:\CRF4\11122003\I375333B.raw

156 <223> OTHER INFORMATION: BMP-9
158 <400> SEQUENCE: 7
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164 Gly Val Pro Thr Leu Lys Tyr His Tyr Glu Gly Met Ser Val Ala Glu
165 20 25 30
168 Cys Gly Cys Arg
169 35
172 <210> SEQ ID NO: 8
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174 <212> TYPE: PRT
175 <213> ORGANISM: Homo sapiens
177 <220> FEATURE:
178 <223> OTHER INFORMATION: BMP-10
180 <400> SEQUENCE: 8
182 Val Pro Thr Lys Leu Glu Pro Ile Ser Ile Leu Tyr Leu Asp Lys Gly
183 1 5 10 15
186 Val Val Thr Tyr Lys Phe Lys Tyr Glu Gly Met Ala Val Ser Glu Cys
187 20 25 30
190 Gly Cys Arg
191 35
194 <210> SEQ ID NO: 9
195 <211> LENGTH: 35
196 <212> TYPE: PRT
197 <213> ORGANISM: Homo sapiens
199 <220> FEATURE:
200 <223> OTHER INFORMATION: BMP-11
202 <400> SEQUENCE: 9
204 Thr Pro Thr Lys Met Ser Pro Ile Asn Met Leu Tyr Phe Asn Asp Lys
205 1 5 10 15
208 Gln Gln Ile Ile Tyr Gly Lys Ile Pro Gly Met Val Val Asp Arg Cys
209 20 25 30
212 Gly Cys Ser
213 35
216 <210> SEQ ID NO: 10
217 <211> LENGTH: 35
218 <212> TYPE: PRT
219 <213> ORGANISM: Bos taurus
221 <220> FEATURE:
222 <223> OTHER INFORMATION: CDMP-2
224 <400> SEQUENCE: 10
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227 1 5 10 15
230 Asn Asn Val Val Tyr Asn Glu Tyr Glu Glu Met Val Val Glu Ser Cys
231 20 25 30
234 Gly Cys Arg
235 35
238 <210> SEQ ID NO: 11
239 <211> LENGTH: 36

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Input Set : A:\stk-075.ST25.txt
Output Set: N:\CRF4\11122003\I375333B.raw

240 <212> TYPE: PRT
241 <213> ORGANISM: Gallus gallus
243 <220> FEATURE:
244 <223> OTHER INFORMATION: Dorsalin
246 <400> SEQUENCE: 11
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252 Gly Val Pro Thr Leu Ile Tyr Asn Tyr Glu Gly Met Lys Val Ala Glu
253 20 25 30
256 Cys Gly Cys Arg
257 35
260 <210> SEQ ID NO: 12
261 <211> LENGTH: 35
262 <212> TYPE: PRT
263 <213> ORGANISM: Drosophila melanogaster
265 <220> FEATURE:
266 <223> OTHER INFORMATION: DPP
268 <400> SEQUENCE: 12
270 Val Pro Thr Gln Leu Asp Ser Val Ala Met Leu Tyr Leu Asn Asp Gln
271 1 5 10 15
274 Ser Thr Val Val Leu Lys Asn Tyr Gln Glu Met Thr Val Val Gly Cys
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278 Gly Cys Arg
279 35
282 <210> SEQ ID NO: 13
283 <211> LENGTH: 35
284 <212> TYPE: PRT
285 <213> ORGANISM: Mus musculus
287 <220> FEATURE:
288 <223> OTHER INFORMATION: GDF-1
290 <400> SEQUENCE: 13
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293 1 5 10 15
296 Asp Asn Val Val Leu Arg His Tyr Glu Asp Met Val Val Asp Glu Cys
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300 Gly Cys Arg
301 35
304 <210> SEQ ID NO: 14
305 <211> LENGTH: 35
306 <212> TYPE: PRT
307 <213> ORGANISM: Mus musculus
309 <220> FEATURE:
310 <223> OTHER INFORMATION: GDF-3
312 <400> SEQUENCE: 14
314 Val Pro Thr Lys Leu Ser Pro Ile Ser Met Leu Tyr Gln Asp Ser Asp
315 1 5 10 15
318 Lys Asn Val Ile Leu Arg His Tyr Glu Asp Met Val Val Asp Glu Cys
319 20 25 30
322 Gly Cys Gly

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/375,333B

DATE: 11/12/2003
TIME: 09:15:25

Input Set : A:\stk-075.ST25.txt
Output Set: N:\CRF4\11122003\I375333B.raw

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326 <210> SEQ ID NO: 15
327 <211> LENGTH: 35
328 <212> TYPE: PRT
329 <213> ORGANISM: Homo sapiens
331 <220> FEATURE:
332 <223> OTHER INFORMATION: GDF-5
334 <400> SEQUENCE: 15
336 Val Pro Thr Arg Leu Ser Pro Ile Ser Ile Leu Phe Ile Asp Ser Ala
337 1 5 10 15
340 Asn Asn Val Val Tyr Lys Gln Tyr Glu Asp Met Val Val Glu Ser Cys
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344 Gly Cys Arg
345 35
348 <210> SEQ ID NO: 16
349 <211> LENGTH: 35
350 <212> TYPE: PRT
351 <213> ORGANISM: Mus musculus
353 <220> FEATURE:
354 <223> OTHER INFORMATION: GDF-6
356 <400> SEQUENCE: 16
358 Val Pro Thr Lys Leu Thr Pro Ile Ser Ile Leu Tyr Ile Asp Ala Gly
359 1 5 10 15
362 Asn Asn Val Val Tyr Lys Gln Tyr Glu Asp Met Val Val Glu Ser Cys
363 20 25 30
366 Gly Cys Arg
367 35
370 <210> SEQ ID NO: 17
371 <211> LENGTH: 35
372 <212> TYPE: PRT
373 <213> ORGANISM: Mus musculus
375 <220> FEATURE:
376 <223> OTHER INFORMATION: GDF-7
378 <400> SEQUENCE: 17
380 Val Pro Ala Arg Leu Ser Pro Ile Ser Ile Leu Tyr Ile Asp Ala Ala
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384 Asn Asn Val Val Tyr Lys Gln Tyr Glu Asp Met Val Val Glu Ala Cys
385 20 25 30
388 Gly Cys Arg
389 35
392 <210> SEQ ID NO: 18
393 <211> LENGTH: 35
394 <212> TYPE: PRT
395 <213> ORGANISM: Mus musculus
397 <220> FEATURE:
398 <223> OTHER INFORMATION: GDF-9
400 <400> SEQUENCE: 18
402 Val Pro Gly Lys Tyr Ser Pro Leu Ser Val Leu Thr Ile Glu Pro Asp
403 1 5 10 15

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 11/12/2003
PATENT APPLICATION: US/09/375,333B TIME: 09:15:26

Input Set : A:\stk-075.ST25.txt
Output Set: N:\CREF4\11122003\I375333B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:64; Xaa Pos. 93
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Seq#:65; Xaa Pos. 56,57,58,59,60,61,62,63,66,69,72,74,76,78,81,83,84,85,86
Seq#:65; Xaa Pos. 87,89,91,92,94,95,97,99,100,104
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Seq#:66; Xaa Pos. 29,31,33,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50
Seq#:66; Xaa Pos. 51,52,53,54,55,56,57,58,59,60,61,62,63,64,66,67,68,69,70
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